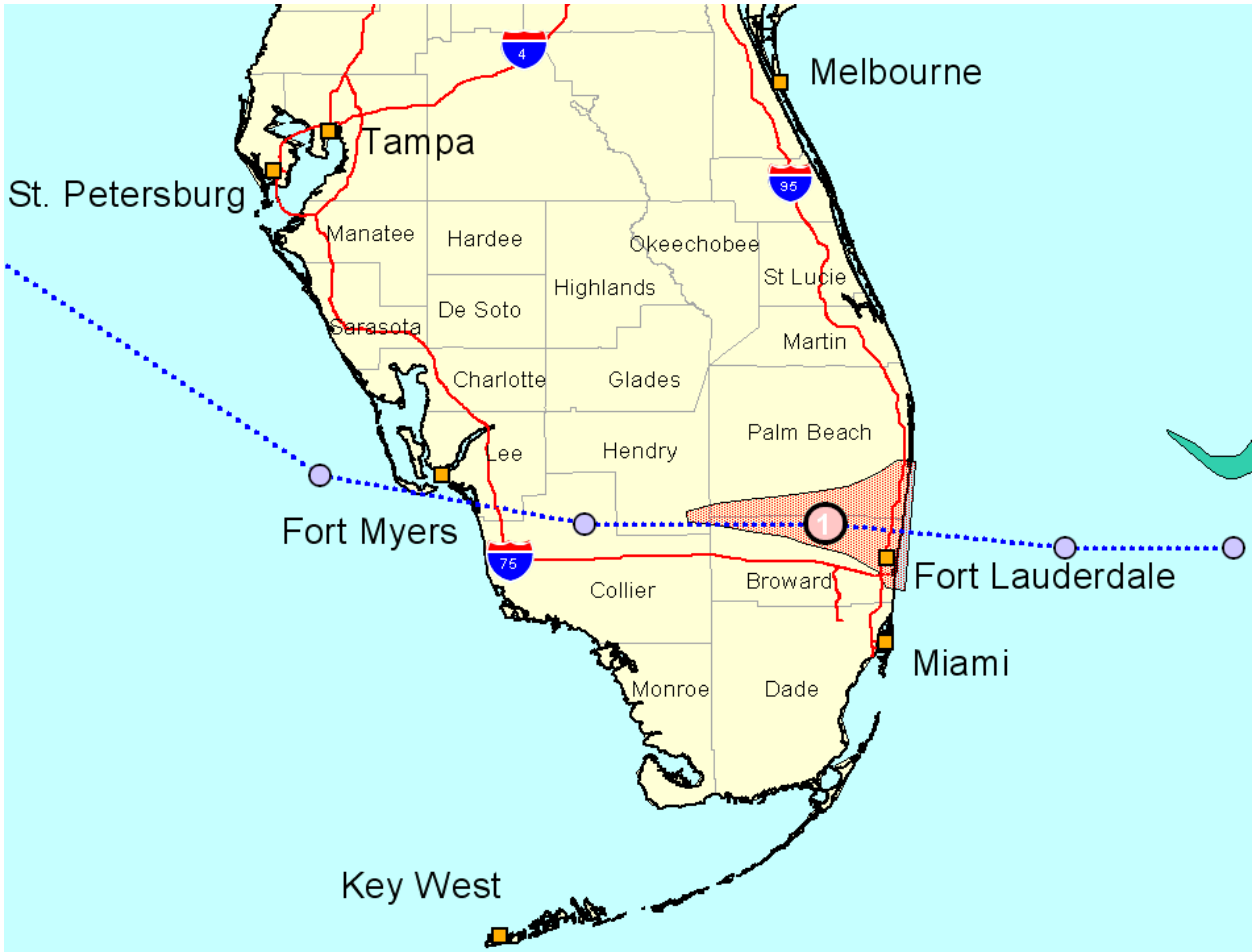
# Hurricane Katrina Wind Distribution

## Landfall Expected In Less Than **24** Hours

**For Official Use Only!**




***Most Probable Landfall Wind Distribution***

This model is based on a Category 1 storm making landfall in near proximity to Fort Lauderdale, FL.

Information provided on this page displays a Category 1 storm making landfall near Fort Lauderdale, FL. These projections are based on information from the NHC ***(0500 EDT 08/25/2005)*** forecast.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Wind Fields**

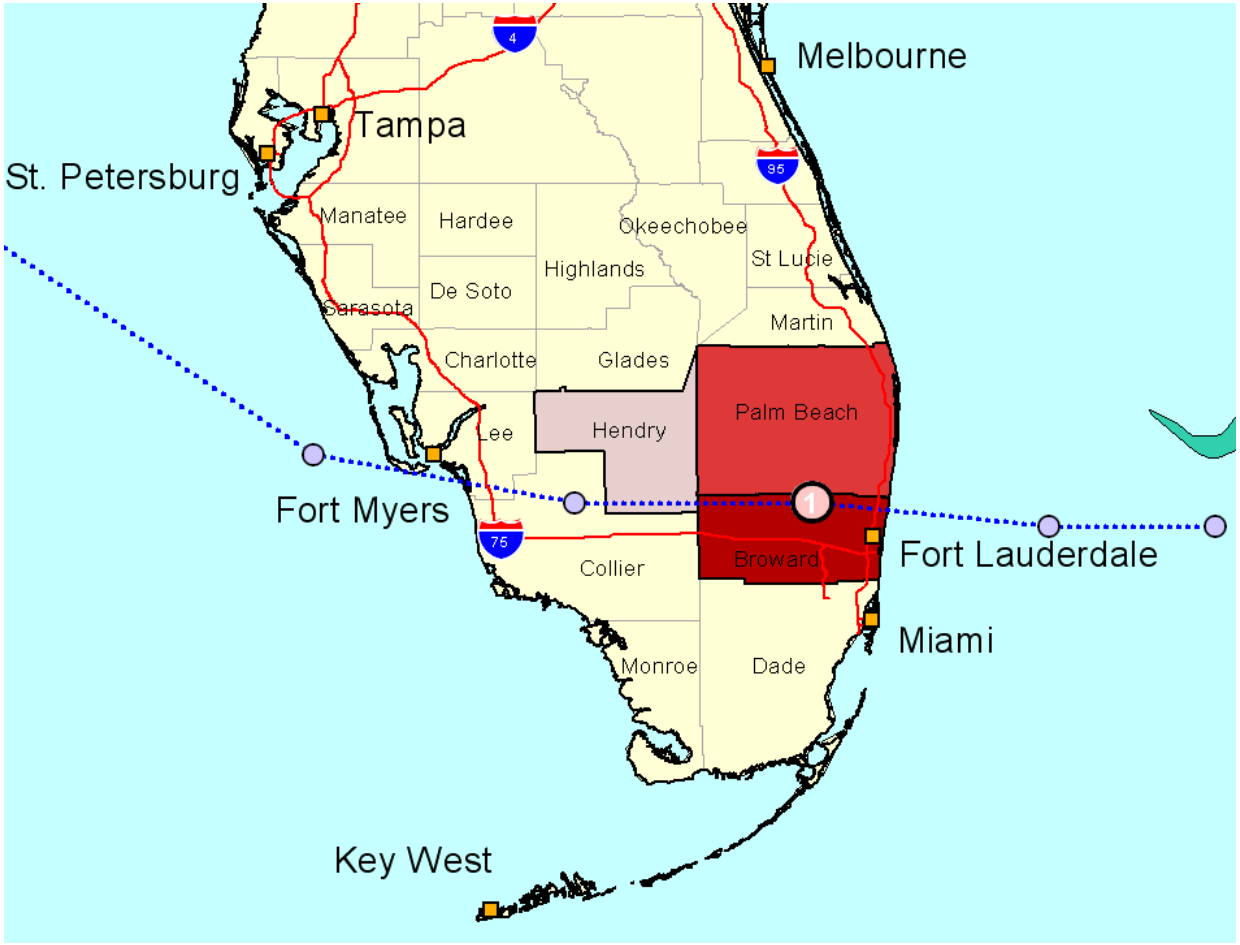
**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Debris Model

## Landfall Expected In Less Than **24** Hours

**For Official Use Only!**




***Most Probable Landfall Debris Model Results***

Florida – 2,086,000 $yd^3$

*Model results per county on following page*

This model is based on a Category 1 storm making landfall in near proximity to Fort Lauderdale, FL.

Information provided on this page displays a Category 1 storm making landfall near Fort Lauderdale, FL. These projections are based on information from the NHC ***(0500 EDT 08/25/2005)*** forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Debris Model**

**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Debris Model

## Landfall Expected In Less Than 24 Hours

**For Official Use Only!**

| STATE | COUNTY | YARDS |
|---|---|---|
| | | |
| Florida | | |
| | Broward | 1,419,000 |
| | Hendry | 1,000 |
| | Palm Beach | 666,000 |
| | | |
| TOTAL | | 2,086,000 |

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Debris Model**

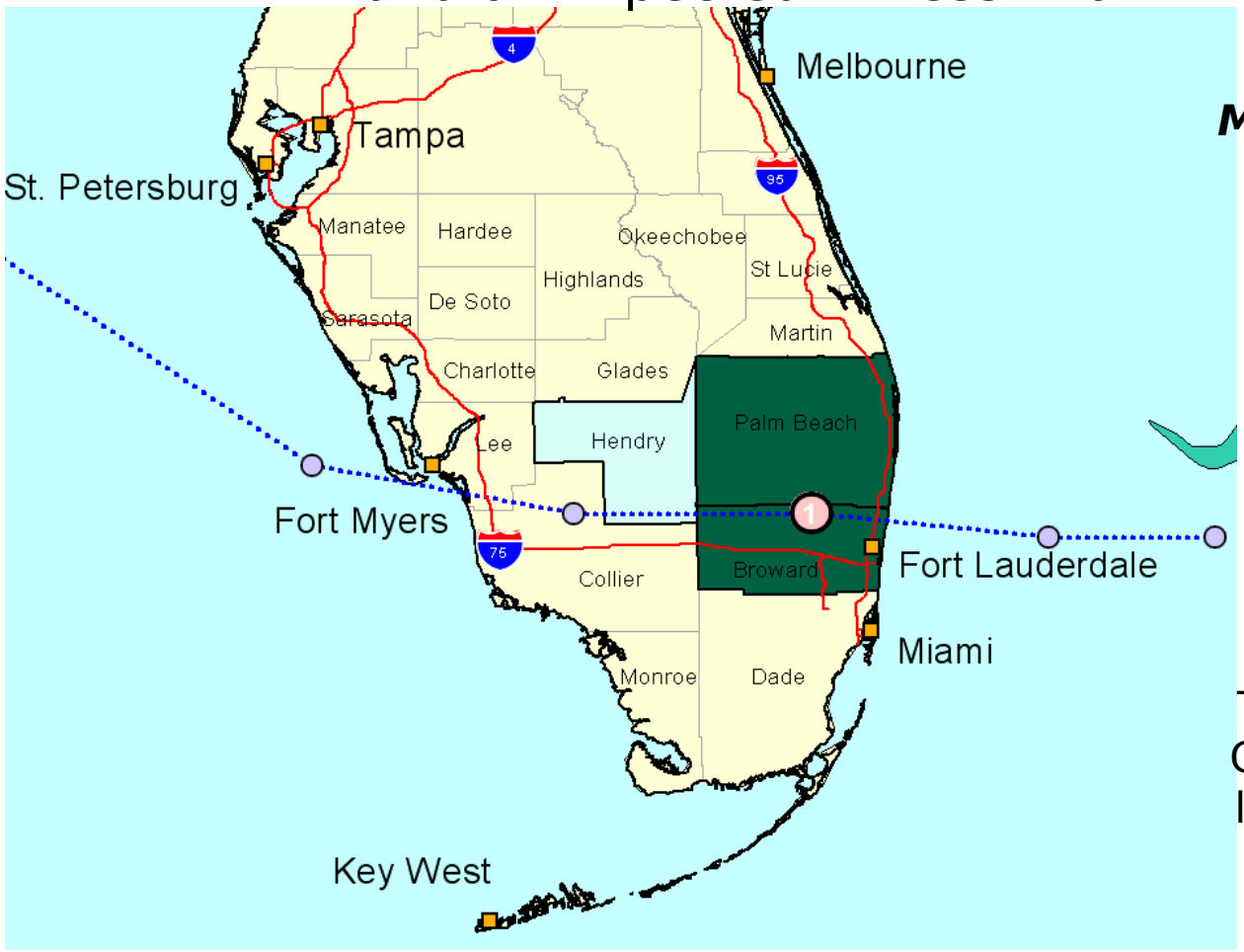
**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Ice Model

## Landfall Expected In Less Than **24** Hours

**For Official Use Only!**




***Most Probable Landfall Ice Model Results***

Florida –
50 Truckloads Day One
50 Truckloads Day Two
54 Truckloads Day Three

*Model results per county on following page*

This model is based on a Category 1 storm making landfall in near proximity to Fort Lauderdale, FL.

Information provided on this page displays a Category 1 storm making landfall near Fort Lauderdale, FL. These projections are based on information from the NHC ***(0500 EDT 08/25/2005)*** forecast. The amount of ice forecasted is based on Mission Guide Book requirements (8 pounds per day per person) and Ice SME input and represents a first day daily need.

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Ice Model**

**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Ice Model

## Landfall Expected In Less Than **24** Hours

**For Official Use Only!**

**Ice/Water Commodities - Trucks/Distribution Lanes Ramp-up**
**(Number of Trucks Each Commodity and Lanes Anticipated - end of each day)**

| | Day One (25%)* | Day Two (50%)* | Day Three (100%)* | Commodity Trucks Day 1-3 Total | Within Hurricane Force Winds Population | Households |
|---|---|---|---|---|---|---|
| **NHC Forecast Track** | | | | | | |
| Florida | 50 | 50 | 54 | 154 | 1,342,000 | 577,000 |
| **Total** | **50** | **50** | **54** | **154** | **1,342,000** | **577,000** |

**Key assumption is that establishment of distribution lanes will be the limiting factor.**

* Assumption is that States/locals (FL is the * exception) will have the capability to establish about 25% of needed distribution lanes in the first 24 hours post-landfall, about 50% of needed distribution lanes in the first 48 hours after landfall, and all needed lanes by 72 hours post landfall. Florida, due to past experience, estimates they can establish up to 50 distribution lanes per day.

** **Assumption for Katrina** - Assumption is that 20 percent of the resident population will require ice/water due to power outages in areas experiencing hurricane force winds

The amount of ice forecasted is based on Mission Guide Book requirements (8 pounds per person) and Ice SME input and represents a first day daily need. The assumption in this scenario is that 40% of the resident population affected by Katrina will have power outage in this area will cause a need for ice.

Details about this model may be obtained at
**https://englink.usace.army.mil**
or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Ice Model**

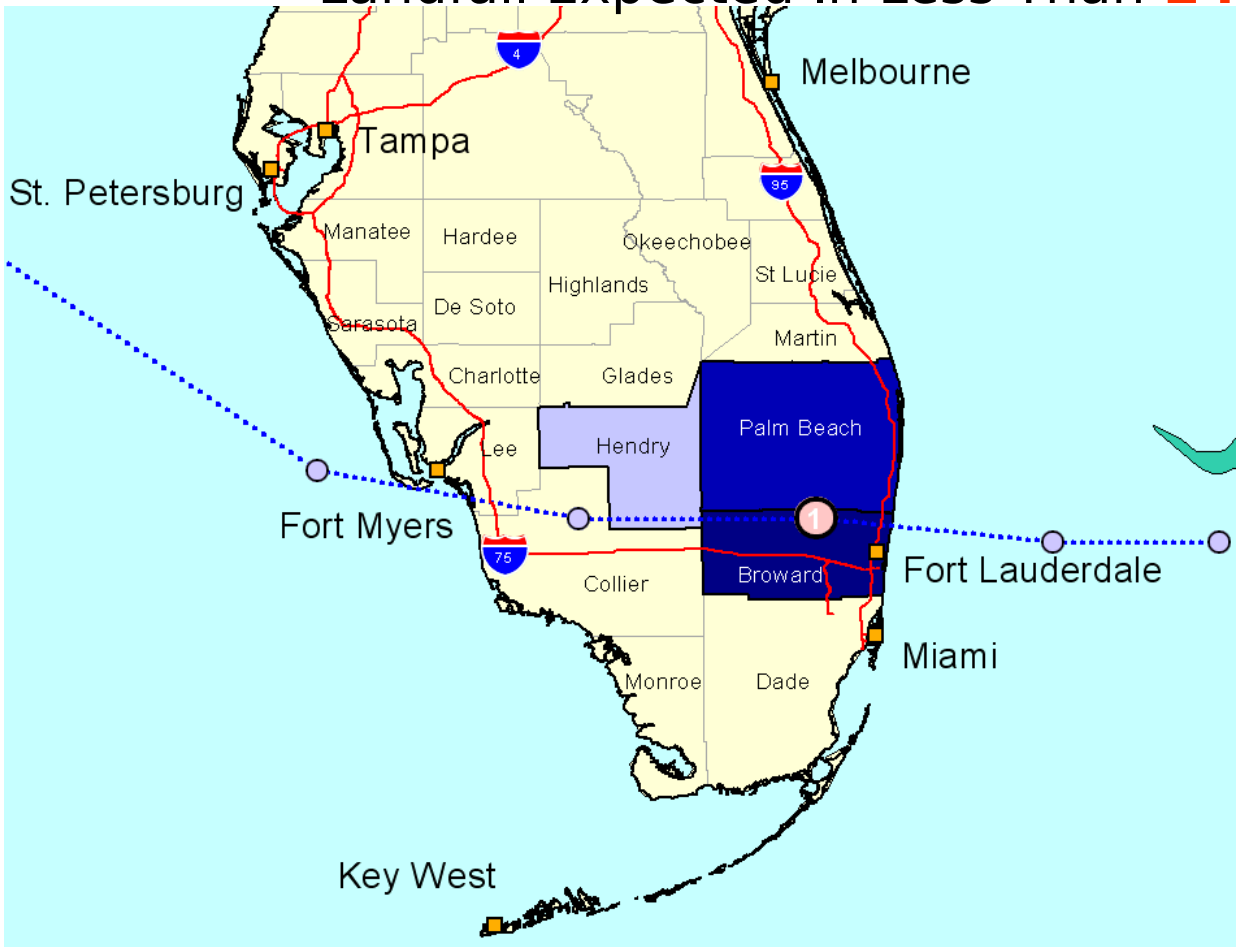
**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Water Model

## Landfall Expected In Less Than **24** Hours

**For Official Use Only!**




### ***Most Probable Landfall Water Model Results***

Florida –
50 Truckloads Day One
50 Truckloads Day Two
54 Truckloads Day Three

*Model results per county on following page*

This model is based on a Category 1 storm making landfall in near proximity to Fort Lauderdale, FL.

Information provided on this page displays a Category 1 storm making landfall near Fort Lauderdale, FL. These projections are based on information from the NHC ***(0500 EDT 08/25/2005)*** forecast. The amount of water forecasted is based on Mission Guide Book requirements (3 liters per person per day) and Water SME input and represents a first day daily need.

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Water Model**

**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Water Model

## Landfall Expected In Less Than **24** Hours

**For Official Use Only!**

**Ice/Water Commodities - Trucks/Distribution Lanes Ramp-up**
**(Number of Trucks Each Commodity and Lanes Anticipated - end of each day)**

| | Day One (25%)* | Day Two (50%)* | Day Three (100%)* | Commodity Trucks Day 1-3 Total | Within Hurricane Force Winds Population | Households |
|---|---|---|---|---|---|---|
| **NHC Forecast Track** | | | | | | |
| Florida | 50 | 50 | 54 | 154 | 1,342,000 | 577,000 |
| **Total** | **50** | **50** | **54** | **154** | **1,342,000** | **577,000** |

**Key assumption is that establishment of distribution lanes will be the limiting factor.**

* Assumption is that States/locals (FL is the * exception) will have the capability to establish about 25% of needed distribution lanes in the first 24 hours post-landfall, about 50% of needed distribution lanes in the first 48 hours after landfall, and all needed lanes by 72 hours post landfall. Florida, due to past experience, estimates they can establish up to 50 distribution lanes per day.

** **Assumption for Katrina** - Assumption is that 20 percent of the resident population will require ice/water due to power outages in areas experiencing hurricane force winds

The amount of water forecasted is based on Mission Guide Book requirements (3 liters per person) and Water SME input and represents a first day daily need. The assumption in this scenario is that 40% of the resident population affected by Katrina will have power outage in this area will cause a need for water.

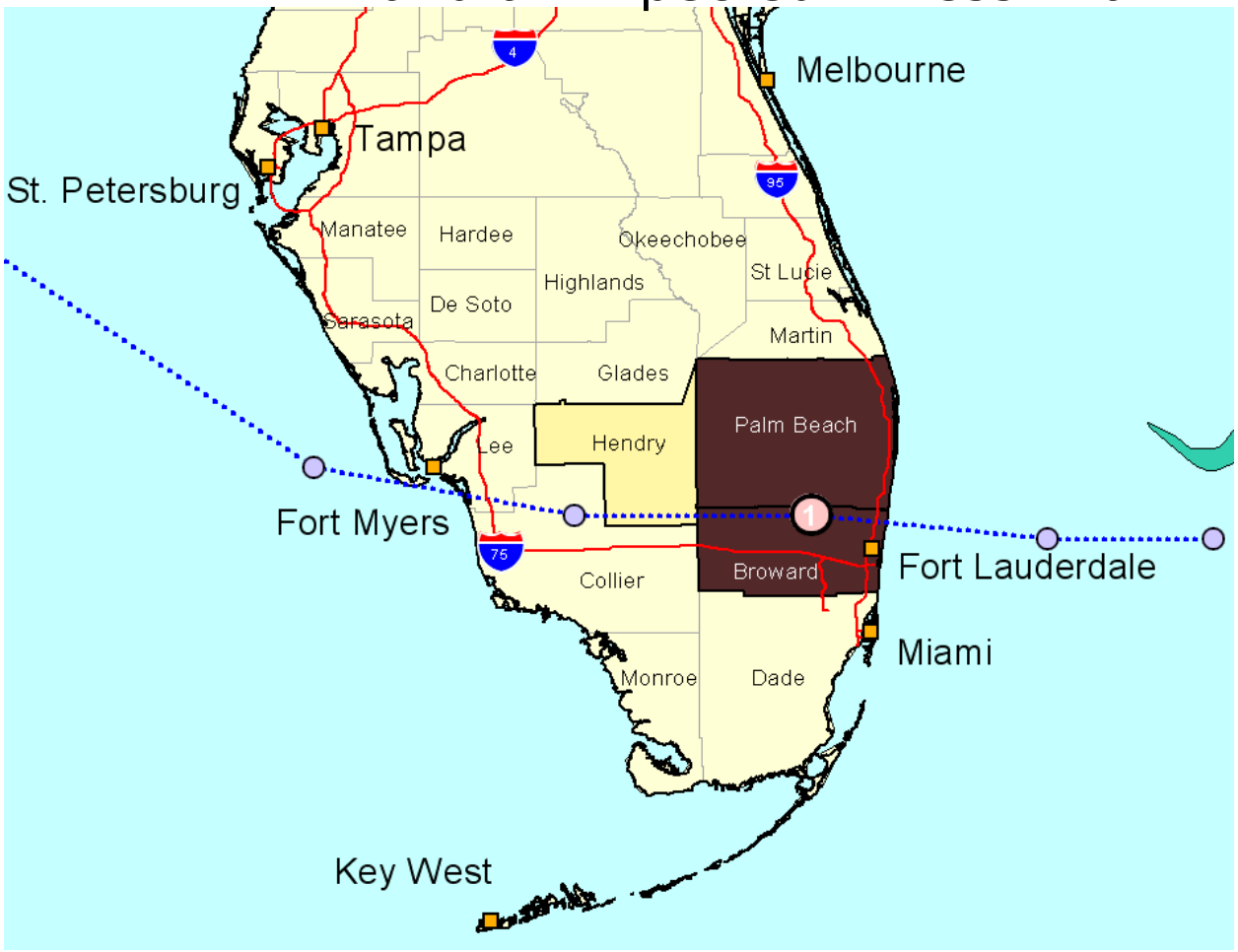
Details about this model may be obtained at https://englink.usace.army.mil

or contact ENGLink at 1-877-936-4546

# Hurricane Katrina Population Model

## Landfall Expected In Less Than **24** Hours

**For Official Use Only!**




***Most Probable Landfall Population Model Results***

Florida – 1,342,000 persons

*Model results per county on following page*

This model is based on a Category 1 storm making landfall in near proximity to Fort Lauderdale, FL.

Information provided on this page displays a Category 1 storm making landfall near Fort Lauderdale, FL. These projections are based on information from the NHC ***(0500 EDT 08/25/2005)*** forecast. The number of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values).

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers **Hurricane Katrina Population Model**

**Generated By:** Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:** HURREVAC LRL-DEBRIS

# Hurricane Katrina Population Model

## Landfall Expected In Less Than **24** Hours

**For Official Use Only!**

| State | County | Population per County |
|---|---|---|
| | | |
| Florida | | |
| | Broward | 930,000 |
| | Hendry | 1,000 |
| | Palm Beach | 411,000 |
| | | |
| TOTAL | | 1,342,000 |

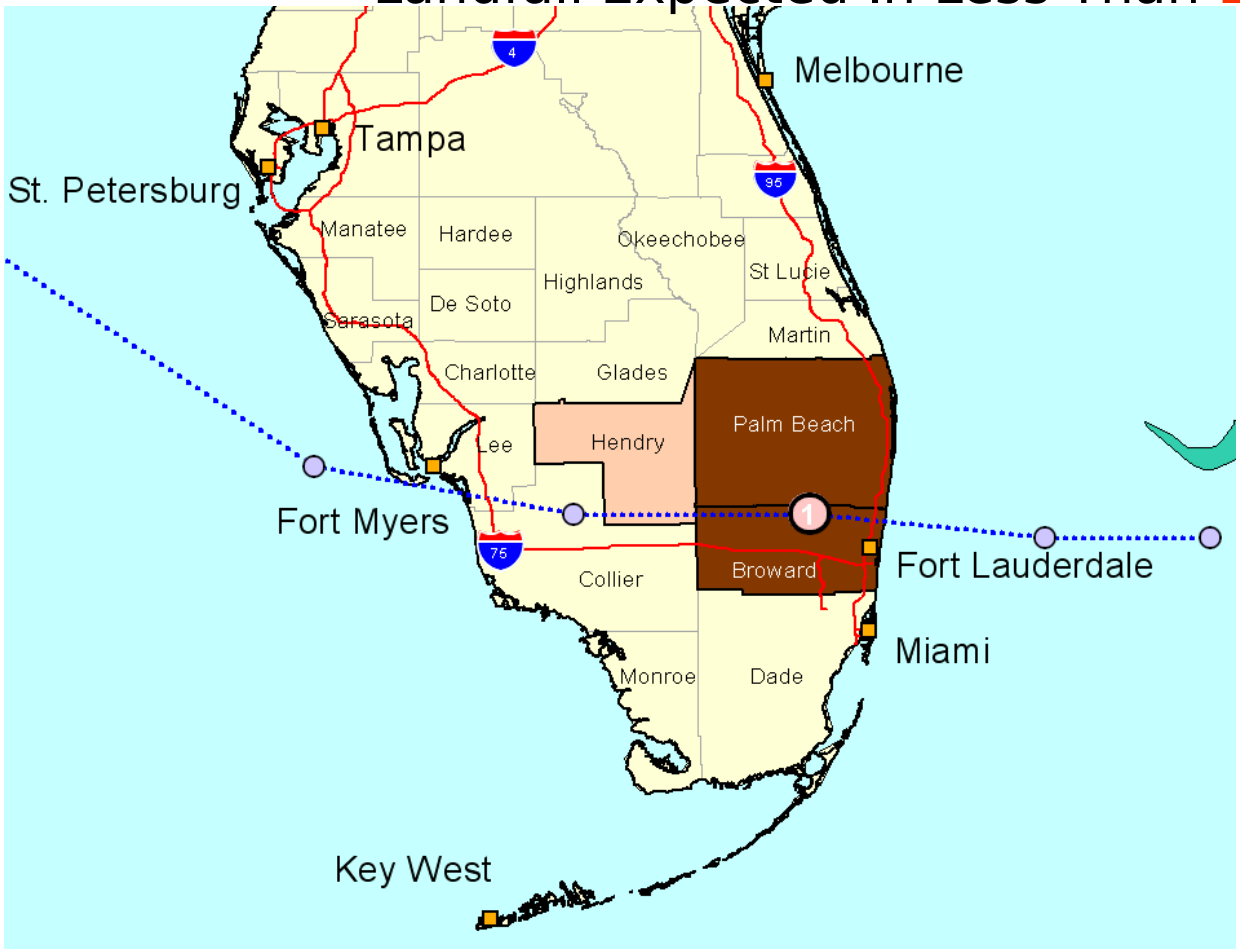
The number of persons estimated to be within hurricane force winds comes from Census 2000 values.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

# Hurricane Katrina Households Model

## Landfall Expected In Less Than **24** Hours

**For Official Use Only!**




***Most Probable Landfall Households Model Results***

Florida – 577,000 households

*Model results per county on following page*

This model is based on a Category 1 storm making landfall in near proximity to Fort Lauderdale, FL.

Information provided on this page displays a Category 1 storm making landfall near Fort Lauderdale, FL. These projections are based on information from the NHC ***(0500 EDT 08/25/2005)*** forecast. The number of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values).

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Households Model**

**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Households Model

## Landfall Expected In Less Than 24 Hours

**For Official Use Only!**

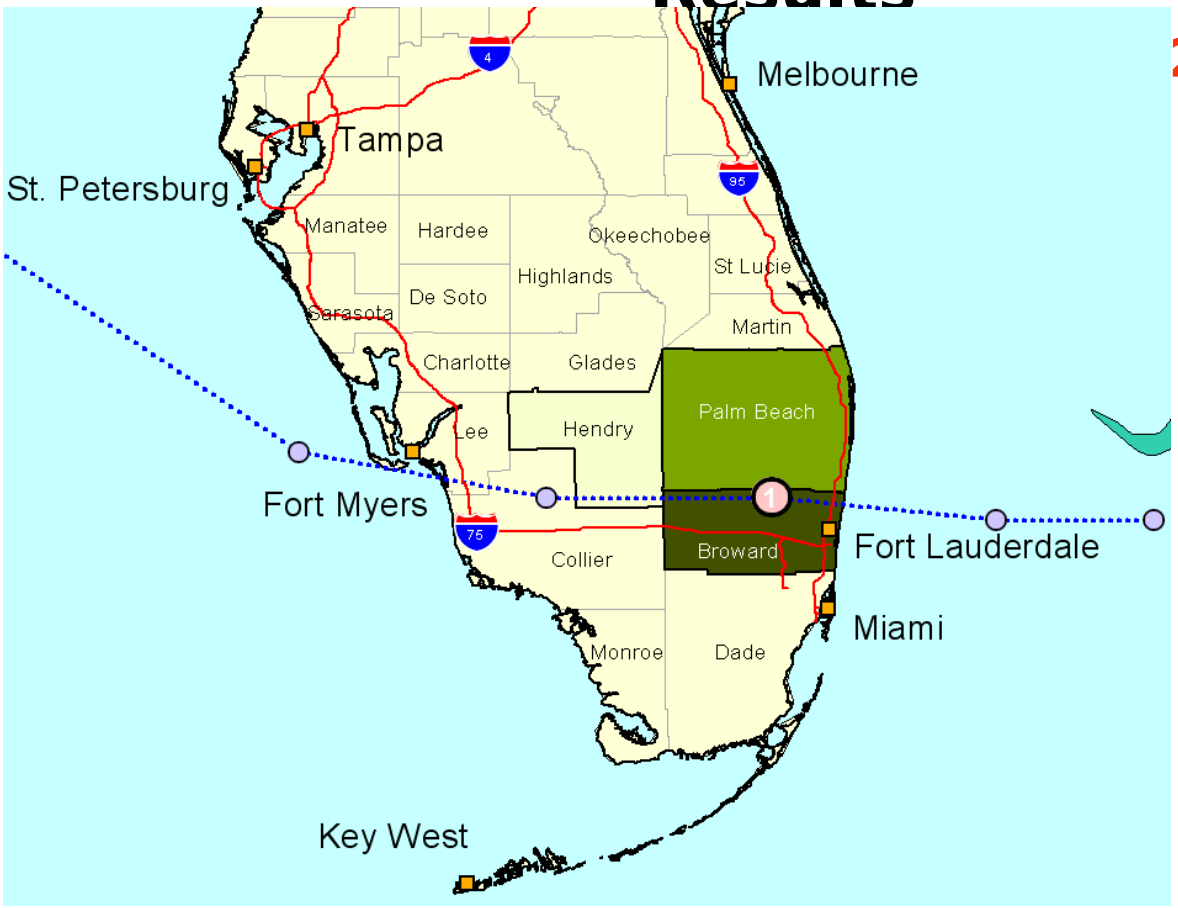
| State | County | Households per County |
|---|---|---|
| | | |
| Florida | | |
| | Broward | 388,000 |
| | Hendry | 1,000 |
| | Palm Beach | 188,000 |
| | | |
| TOTAL | | 577,000 |

The number of households estimated to be within hurricane force winds comes from Census 2000 values.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

# Hurricane Katrina Temporary Roofing Model Results

**For Official Use Only!**




**24**

***Most Probable Landfall Temporary Roofing Model Results***

Florida – 7,700

*Model results per county on following page*

This model is based on a Category 1 storm making landfall in near proximity to Fort Lauderdale, FL.

Information provided on this page displays a Category 1 storm making landfall near Fort Lauderdale, FL. These projections are based on information from the NHC ***(0500 EDT 08/25/2005)*** forecast. The amount of temporary roofing that may be required is based on 3% of housing units damaged in CAT 1 wind area. This only indicates possible need – not necessarily a mission to repair roofs.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Roofing Model**

**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Temporary Roofing Model Results

## Landfall Expected In Less Than **24** Hours

**For Official Use Only!**

| State | County | Houseunits per County |
|---|---|---|
| | | |
| Florida | | |
| | Broward | 5,400 |
| | Hendry | 100 |
| | Palm Beach | 2,200 |
| | | |
| TOTAL | | 7,700 |

**THIS IS AN EXPERIMENTAL MODEL !! THE VALUES ARE PRELIMINARY AND SHOULD BE CONSIDERED A GUIDE BUT NOT AN ABSOLUTE VALUE !!**

The amount of temporary roofing that may be required is based on 3% of housing units damaged in CAT 1 wind area. This only indicates possible need – not necessarily a mission to repair roofs.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Roofing Model**

**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Temporary Housing Model Results

Landfall Expected In Less Than **24** Hours

**For Official Use Only!**

***Most Probable Landfall Temporary Housing Model Results***

Florida – 000

*Model results per county on following page*

**There is no expected temporary housing need**

This model is based on a Category 1 storm making landfall in near proximity to Fort Lauderdale, FL.

Information provided on this page displays a Category 1 storm making landfall near Fort Lauderdale, FL. These projections are based on information from the NHC ***(0500 EDT 08/25/2005)*** forecast. The amount of temporary housing that may be required is based on no housing need in CAT 1 wind area.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Housing Model**

**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Temporary Housing Model Results

For Official Use Only!

## Landfall Expected In Less Than 24 Hours

**There is no expected temporary housing need**

**THIS IS AN EXPERIMENTAL MODEL !! THE VALUES ARE PRELIMINARY AND SHOULD BE CONSIDERED A GUIDE BUT NOT AN ABSOLUTE VALUE !!**

The amount of temporary housing that may be required is based on no housing need in CAT 1 wind areas.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Housing Model**

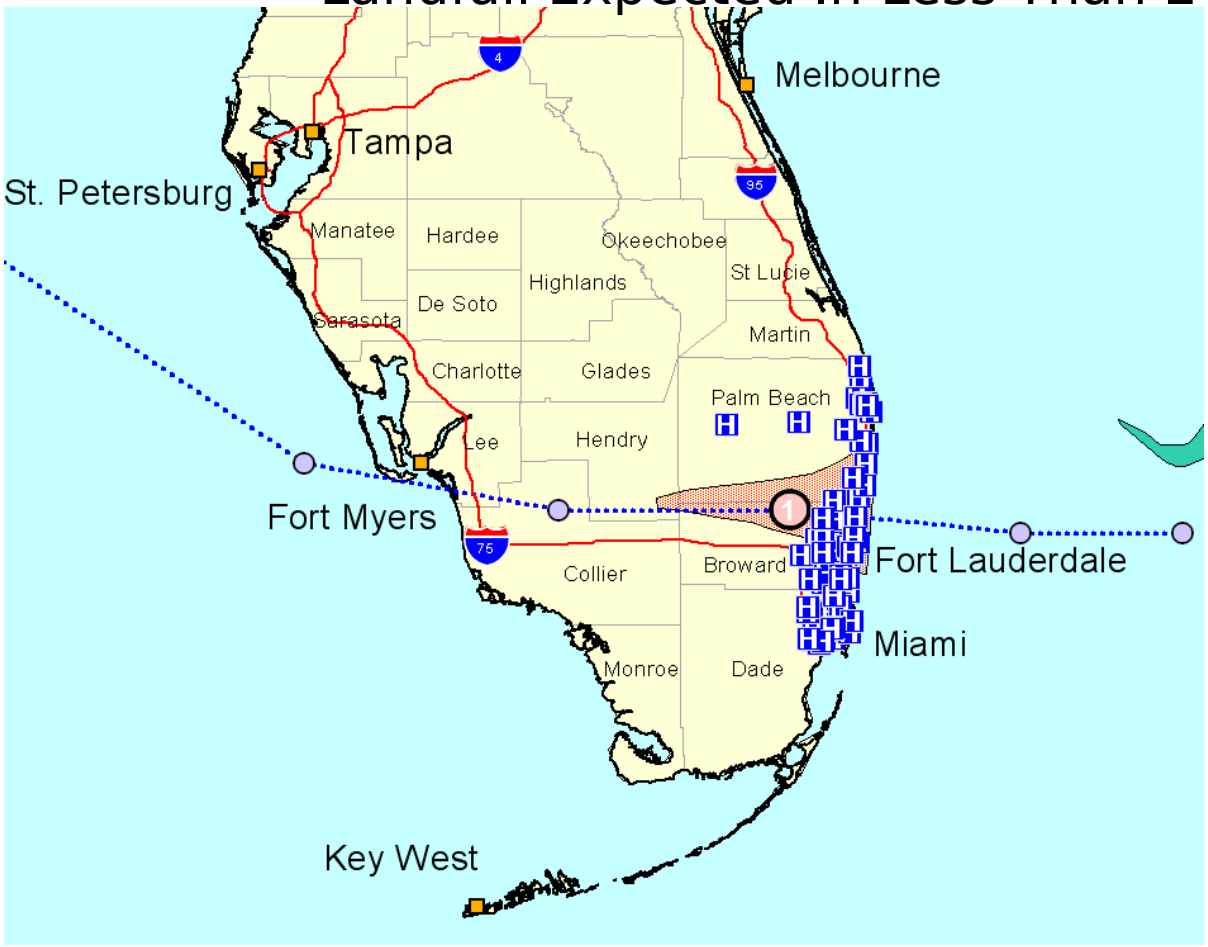
**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Hospitals

## Landfall Expected In Less Than 24 Hours

**For Official Use Only!**




***Most Probable Landfall Hospitals inside Hurricane Force Winds or In Less Than 25 miles of Hurricane Force Winds***

***Critical Infrastructure – 68 Hospitals***

This model is based on a Category 1 storm making landfall in near proximity to Fort Lauderdale, FL.

Information provided on this page displays a Category 1 storm making landfall near Fort Lauderdale, FL. These projections are based on information from the NHC ***(0500 EDT 08/25/2005)*** forecast.

The number of hospitals included in this output are those that would be included within estimated hurricane force winds (data source: HAZUS MH).

Details about this model may be obtained at
**https://englink.usace.army.mil**
or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Hospitals**

**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Police Stations

## Landfall Expected In Less Than 24 Hours

**For Official Use Only!**

***Most Probable Landfall Police Stations inside Hurricane Force Winds or In Less Than 25 miles of Hurricane Force Winds***

***Critical Infrastructure – 143 Police Stations***

This model is based on a Category 1 storm making landfall in near proximity to Fort Lauderdale, FL.

Information provided on this page displays a Category 1 storm making landfall near Fort Lauderdale, FL. These projections are based on information from the NHC ***(0500 EDT 08/25/2005)*** forecast.

The number of police stations included in this output are those that would be included within estimated hurricane force winds (data source: HAZUS MH).

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

**Hurricane Katrina Police Stations**

**Generated By:**
Terry Siemsen, LRL 0730 EDT 08/25/2005

**Sources:**
HURREVAC
LRL-DEBRIS

# Hurricane Katrina Fire Stations

## Landfall Expected In Less Than 24 Hours

**For Official Use Only!**

***Most Probable Landfall Fire Stations inside Hurricane Force Winds or In Less Than 25 miles of Hurricane Force Winds***

***Critical Infrastructure – 66 Fire Stations***

This model is based on a Category 1 storm making landfall in near proximity to Fort Lauderdale, FL.

Information provided on this page displays a Category 1 storm making landfall near Fort Lauderdale, FL. These projections are based on information from the NHC ***(0500 EDT 08/25/2005)*** forecast.

The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: HAZUS MH).

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

| US Army Corps of Engineers | **Hurricane Katrina Fire Stations** |
|---|---|
| **Generated By:** Terry Siemsen, LRL 0730 EDT 08/25/2005 | |
| **Sources:** HURREVAC LRL-DEBRIS | Page 18 of 18 |